

ABSTRACT OF THE DISCLOSURE

A mobile communications system includes a radio access network, such as an Enhanced General Packet Radio Service (EGPRS) network, in which mobile stations are able to enter into a discontinuous transmission (DTX) mode. During DTX mode of a first mobile station that is allocated a channel portion (e.g., a time slot of a frame), the radio access network is able to multiplex traffic from another mobile station onto the same channel portion. A mechanism is provided to enable the first mobile station to send a request for re-allocation of the channel portion. The request includes a real-time fast access associated control channel (RTFACCH) resource request message (RTRRM). In response to the RTRRM, the radio access network sends an RTFACCH resource assignment message (RTUAM). An interleaving scheme is also provided for half-rate mobile stations, in which one set of traffic frames are interleaved over plural bursts according to a first algorithm and a second set of traffic frames are interleaved over plural bursts according to a second algorithm.

09745787-111700